AMENDMENTS TO THE SPECIFICATION

Please make the following amendments to the specification.

Please replace paragraph 0022 with the following paragraph:

Reference is made to the appendix submitted herein. The appendix contains the following: Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_01.txt (24,689 KB), which was created February 20, 2007; and Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_02.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_03.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_04.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_05.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_06.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_07.txt (24,683 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_08.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_09.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_10.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_11.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_12.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_13.txt (24,681 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_14.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_15.txt (24,681 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_16.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_17.txt (24,681 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_18.txt (24,681 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_19.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_20.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_21.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_22.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_23.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_24.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_25.txt (24,681 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_26.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_27.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_28.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_29.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_30.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_31.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_32.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_33.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_34.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_35.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_36.txt (24,680 KB); Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_37.txt (24,680 KB);

Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_38.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_39.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_40.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_41.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_42.txt (24,698 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_43.txt (24,684 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_44.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_45.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_46.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_47.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_48.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_49.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_50.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_51.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_52.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_53.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_54.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_55.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_56.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_57.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_58.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_59.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_60.txt (24,680 KB);
Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_61.txt (24,680 KB);
and Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_62.txt (24,683 KB), which were created January 22, 2007; and Patent25_US_10_709577_Sequence_Listing_Feb_2007_Amended_63.txt (9,179 KB), which was created February 26, 2007, which altogether are a sequence listing in accordance with 37 C.F.R. §§ 1.821-1.825, the contents of which are incorporated by reference herein.

Please replace paragraph 0263 with the following paragraph:

Fig. 23A is a schematic representation of an "operon-like" cluster of novel human hairpin sequences detected by a bioinformatic oligonucleotide detection engine constructed and operative in accordance with a preferred embodiment of the present invention, and non-GAM hairpin sequences used as negative controls thereto[[;]]. The hairpins shown are as follows: N2 (SEQ ID NO: 10068286), N3 (SEQ ID NO: 10068287), MIR23 (SEQ ID NO: 10068288), GAM252 (SEQ ID NO: 10068289), GAM7617 (SEQ ID NO: 10068290), N252 (SEQ ID NO: 10068291), N4 (SEQ ID NO: 10068292), N0 (SEQ ID NO: 10068293), N6 (SEQ ID NO: 10068294), MIR24 (SEQ ID NO: 10068295), and N7 (SEQ ID NO: 10068296).

Please replace paragraph 0266 with the following paragraph:

Fig. 24A is an annotated sequence of EST72223 (SEQ ID NO: 10068281) comprising known human miRNA oligonucleotide MIR98 and novel human oligonucleotide GAM25 PRECURSOR detected by the oligonucleotide detection system of the present invention; and. Additionally annotated in EST72223 are the miRNA-98 hairpin in bold (SEQ ID NO: 10068282), the sequence of the mature miRNA-98 in bold and underline (SEQ ID NO: 10068283), the sequence of the GAM25 hairpin in bold (SEQ ID NO: 10068284), and the sequence of the mature miRNA of GAM25 in bold and underline (SEQ ID NO: 10068285).

Please replace paragraph 0499 with the following paragraph:

Transcript products were 705 nt (EST72223),102 nt (MIR98 precursor), 125 nt (GAM25 precursor) long. EST72223 was PCR amplified with T7-EST 72223 forward primer: 5'-TAATACGACTCACTATAGGCCCTTATTAGAGGATTCTG CT-3' (SEQ ID NO: 10068178) and T3-EST72223 reverse primer:" AATTAACCCTCACTAAAGGTTTTTTTTTCCTGAGA CAGAGT-3' (SEQ ID NO: 10068179). MIR98 was PCR amplified using EST72223 as a template with T7MIR98 forward primer: 5'-TAATACGACTCACTATAGGGTGAGGTAGTAAG TTGTATTGTT-3' (SEQ ID NO: 10068180) and T3MIR98 reverse primer: 5'AATTAACCCTCACTAAAGGGAAAGTAGTAAGT TGTATAGTT-3' (SEQ ID NO: 10068181). GAM25 was PCR amplified using EST72223 as a template with GAM25 forward primer: 5' GAGGCAGGAGAATTGCTTGA-3' (SEQ ID NO: 10068182) and T3 EST72223 reverse primer: 5'-AATTAACCCTCACTAAAGGCCTGAGACAGAGTCTTGCT C-3' (SEQ ID NO: 10068183).

Please replace paragraphs 0562-0582 with the following paragraphs:

Sequence: 5'(5phos)rUrGrGCCTATAGTGAGTCGTATTA(3I nvdT)3' (SEQ ID NO: 10068186)

2.Name:5Ada RNA-DNA XbaBseRI

Sequence:5'AAAGGAGGAGCTCTAGrArUrA 3' (SEQ ID NO: 10068187) or optionally:

3.Name:5Ada MC RNA-DNA PstAtaBser

-6-

Sequence:5'CCTAGGAGGAGGACGTCTGrCrArG 3' (SEQ ID NO: 10068188)

4.Name:3'Ada nT7 MC RNA-DNA

Sequence:5'(5phos)rCrCrUATAGTGAGTCGTATTATCT (3InvdT)3' (SEQ ID NO: 10068189)

The following DNA primers are included in the present invention:

1.Name:T7 NcoI-RT-PCR primer

Sequence:5'TAATACGACTCACTATAGGCCA   3'   (SEQ   ID NO: 10068308)

2.Name:T7NheI SpeI-RT-PCR primer

Sequence:5'GCTAGCACTAGTTAATACGACTCACTATAGGC CA 3' (SEQ ID NO: 10068309)

3.Name:5Ada XbaBseRI Fwd

Sequence:5'AAAGGAGGAGCTCTAGATA 3' (SEQ ID NO: 10068192)

4.Name:Pst-5Ada XbaBseRI Fwd

Sequence:5'TGACCTGCAGAAAGGAGGAGCTCTAGATA   3' (SEQ ID NO: 10068193)

or optionally:

5.Name:5Ada MC PstAtaBser fwd

Sequence:5'ATCCTAGGAGGAGGACGTCTGCAG 3' (SEQ ID NO: 10068306)

6.Name:RT nT7 MC XbaI

Sequence:5'GCTCTAGGATAATACGACTCACTATAGG   3' (SEQ ID NO: 10068307)